| Courage to Soar | | | |
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| 2004 Mathematics | | | |
| Curriculum Standards | | | |
| **Kansas Mathematics** | | | |
| **Grade 3** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Soaring Higher | KS | MA.3.1.1.K2.a | Compares and orders whole numbers from 0 through 10,000 with and without the use of concrete objects |
| The Flight Timeline | KS | MA.3.2.4.K1.h | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (graphs using concrete objects, representational objects, or abstract representations, pictographs, frequency tables, horizontal and vertical bar graphs, Venn diagrams or other pictorial displays, line plots, charts, and tables to organize and display data) |
| The Flight Timeline | KS | MA.3.3.4.K1 | Uses a number line (horizontal/vertical) to model the basic multiplication facts through the 5s and the multiplication facts of the 10s. |
| Having the Right Stuff | KS | MA.3.2.4.K1.h | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (graphs using concrete objects, representational objects, or abstract representations, pictographs, frequency tables, horizontal and vertical bar graphs, Venn diagrams or other pictorial displays, line plots, charts, and tables to organize and display data) |
| Having the Right Stuff | KS | MA.3.2.4.K1.i | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (Venn diagrams to sort data and show relationships) |
| Having the Right Stuff | KS | MA.3.4.2.K1.e | Organizes, displays, and reads numerical (quantitative) and non-numerical (qualitative) data in a clear, organized, and accurate manner including a title, labels, categories, and whole number intervals using these data displays (Venn diagrams or other pictorial displays, e.g., glyphs) |

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| Flying a Styrofoam Plane | KS | MA.3.3.2.K3.a | Selects, explains the selection of, and uses measurement tools, units of measure, and degree of accuracy appropriate for a given situation to measure length width, and height to the nearest half inch, inch, foot, and yard; and to the nearest whole unit of nonstandard unit |
| Flying a Styrofoam Plane | KS | MA.3.3.2.K3.b | Selects, explains the selection of, and uses measurement tools, units of measure, and degree of accuracy appropriate for a given situation to measure length, width, and height to the nearest centimeter and meter |
| Looking for Answers:A research project | KS | MA.3.2.4.K1.i | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (Venn diagrams to sort data and show relationships) |
| Controlling the Plane | KS | MA.3.4.2.K3.b | Finds these statistical measures of a data set with less than ten data points using whole numbers from 0 through 1,000 (range,) |
| Controlling the Plane | KS | MA.3.4.2.K3.d | Finds these statistical measures of a data set with less than ten data points using whole numbers from 0 through 1,000 (median when data set has an odd number of data points) |
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| **Courage to Soar** | | | |
| **2004 Mathematics** | | | |
| **Curriculum Standards** | | | |
| **Kansas Mathematics** | | | |
| **Grade 4** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Soaring Higher | KS | MA.4.1.1.K2.a | Compares and orders whole numbers from 0 through 100,000 |
| Soaring Higher | KS | MA.4.4.2.K1.h | Organizes, displays, and reads numerical (quantitative) and non-numerical (qualitative) data in a clear, organized, and accurate manner including a title, labels, categories, and whole number intervals using these data displays (line graphs) |
| The Flight Timeline | KS | MA.4.1.1.K2.a | Compares and orders whole numbers from 0 through 100,000 |

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| The Flight Timeline | KS | MA.4.2.4.K1.a | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (process models (concrete objects, pictures, diagrams, number lines, hundred charts, measurement tools, multiplication arrays, division sets, or coordinate planes/grids) to model computational procedures, mathematical relationships, and equations) |
| The Flight Timeline | KS | MA.4.2.4.K1.h | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (graphs using concrete objects, pictographs, frequency tables, horizontal and vertical bar graphs, line graphs, circle graphs, Venn diagrams, line plots, charts, and tables to organize and display data) |
| Having the Right Stuff | KS | MA.4.2.4.K1.h | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (graphs using concrete objects, pictographs, frequency tables, horizontal and vertical bar graphs, line graphs, circle graphs, Venn diagrams, line plots, charts, and tables to organize and display data) |
| Having the Right Stuff | KS | MA.4.2.4.K1.i | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (Venn diagrams to sort data and to show relationships) |
| Flying a Styrofoam Plane | KS | MA.4.3.2.K2.a | Selects, explains the selection of, and uses measurement tools, units of measure, and degree of accuracy appropriate for a given situation to measure length, width, and height to the nearest fourth of an inch or to the nearest centimeter |
| Looking for Answers:A research project | KS | MA.4.4.2.K2 | Collects data using different techniques (observations, polls, surveys, interviews, or random sampling) and explains the results. |
| Controlling the Plane | KS | MA.4.2.4.K1.h | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (graphs using concrete objects, pictographs, frequency tables, horizontal and vertical bar graphs, line graphs, circle graphs, Venn diagrams, line plots, charts, and tables to organize and display data) |

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| Controlling the Plane | KS | MA.4.4.2.K3.e | Identifies, explains, and calculates or finds these statistical measures of a data set with less than ten whole number data points using whole numbers from 0 through 1,000 (mean when data set has a whole number mean) |
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| **Courage to Soar** | | | |
| **2004 Mathematics** | | | |
| **Curriculum Standards** | | | |
| **Kansas Mathematics** | | | |
| **Grade 5** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Soaring Higher | KS | MA.5.4.2.K1.d | Organizes, displays, and reads numerical (quantitative) and non-numerical (qualitative) data in a clear, organized, and accurate manner including a title, labels, categories, and whole number and decimal intervals using these data displays (bar and line graphs,) |
| The Flight Timeline | KS | MA.5.3.4.K1 | Locates and plots points on a number line (vertical/horizontal) using integers (positive and negative whole numbers). |
| Having the Right Stuff | KS | MA.5.1.1.K2.a | Student demonstrates number sense for integers, fractions, decimals, and money in a variety of situations and compares and orders integers, |
| Having the Right Stuff | KS | MA.5.2.4.K1.k | Knows, explains, and uses mathematical models to represent mathematical concepts, procedures, and relationships. Mathematical models include (Venn diagrams to sort data and to show relationships) |
| Flying a Styrofoam Plane | KS | MA.5.3.2.K1 | Determines and uses whole number approximations (estimations) for length, width, weight, volume, temperature, time, perimeter, and area using standard and nonstandard units of measure. |
| Looking for Answers:A research project | KS | MA.5.4.2.K2 | Collects data using different techniques (observations, polls, tallying, interviews, surveys, or random sampling) and explains the results. |
| Controlling the Plane | KS | MA.5.4.2.K1.d | Organizes, displays, and reads numerical (quantitative) and non-numerical (qualitative) data in a clear, organized, and accurate manner including a title, labels, categories, and whole number and decimal intervals using these data displays (bar and line graphs,) |